

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,026	03/16/2004	Dale W. Petty	C-3342	2629
7590 10/11/2006		EXAMINER		
M. P. Williams			HODGE, ROBERT W	
210 Main Street Manchester, CT 06040			ART UNIT	PAPER NUMBER
,			1745	
			DATE MAILED: 10/11/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
. Office A-4' O	10/802,026	PETTY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Robert Hodge	1745				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 16 Ma	arch 2004.					
,—						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-3</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>16 March 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) X Notice of References Cited (PTO-892)	4)  Interview Summary					
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	aton Application (F 10-102)				

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "said pins" and "the end surface" in line 11 of the claim. There is insufficient antecedent basis for these limitations in the claim. If applicants meant to recite, "said at least one pin" in line 11 then applicants should so recite. Further if applicants meant to recite in line 10 "at least one pin disposed in the end surface of said manifolds" then applicants should so recite. At present it is unclear where exactly the pin should be located due to the indefiniteness discussed above. In claim 1, "the edges of said fuel cells" lacks antecedent basis in the claim. In claim 1, "the end of each of said manifolds" lack antecedent basis in the claim. It is also unclear which end in the manifold is meant since there are four ends in the manifold. Therefore because of the dependency of claims 2 and 3 on claim 1 the same deficiencies exist.

## Allowable Subject Matter

Claims 1-3 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or fairly suggest at least one pin disposed and extending outwardly in the end surface of each manifold, wherein the manifolds are disposed on opposite sides of the fuel cell stack and a cable is extended in a closed loop about each pin from each manifold. The prior art does allow for various clamping means to sufficiently attach and seal the manifold plates to the fuel cell stack but does not teach the instant invention, and a person having ordinary skill in the art would not be motivated to alter the prior art to make the instant invention.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. 4,345,009 to Fahle et al. teaches bands looped around the exterior of manifold plates disposed around the fuel cell stack.
- U.S. 6,696,193 to Bonk et al. teaches bands looped around the exterior components of a fuel cell stack to hold the components in place.
- U.S. 4,692,391 to Hirota teaches tie rods between the end plates of the fuel cell stack to provide proper compression within the stack.
- U.S. 6,461,756 to Blanchett et al. teaches flexible spring loaded belt members adapted to expand, contract and slide are used to hold the manifolds of a fuel-cell stack in place.

Application/Control Number: 10/802,026 Page 4

Art Unit: 1745

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Trainer Susy Tsang-Foster can be reached on (571) 272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**RWH** 

Ausy Isang Foster SUSYTSANG-FOSTER PRIMARY EXAMINER